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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,112	12/20/2001	Tatsuo Nomura	70904/56820	1680
21874	7590	09/23/2005	EXAMINER	
EDWARDS & ANGELL, LLP			LAM, ANDREW H	
P.O. BOX 55874			ART UNIT	PAPER NUMBER
BOSTON, MA 02205			2624	

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/035,112

Applicant(s)

NOMURA ET AL.

Examiner

Andrew H. Lam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 3/24/02; 8/27/04; 3/1/05
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 14-19 are rejected under 35 U.S.C. 102b) as being anticipated by Watanabe (U.S Patent No. 5,956,160).

Regarding claim 1, Watanabe discloses an image forming system (fig. 1, image forming system), including a printer (fig. 1, printer unit 102) for forming an image on a recording medium and a scanner (fig. 1, scanner unit 101) for optically reading a document image, where the printer and the scanner are used in a systematic manner in which the printer and the scanner are used in combination as a system (fig. 10A, shows a cable 1001 for connecting the scanner with the printer to be used as a combination, col. 6, lines 36-38), wherein: the printer (fig. 1, display section 102a can be LCD or LED

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display col. 3, line 35) and the scanner(fig. 1, operation display section 103) respectively comprises a display section (fig. 1, operation display section 103), in such a manner that at least one of the display sections is so controlled as to have different display formats for a non-systematic (fig. 1, for non-systematic display the unit of the scanner would display formats for the scanner using the display unit 103 while the printer unit would display the status of the printer by using the display 102a) manner and for the systematic manner (col. 3, lines 26-31, the display 103 as part of the scanner can be used for displaying information of both the scanner unit 101 and the printer unit 102) .

Regarding claim 2, Watanabe discloses the image forming system as set forth in claim 1, wherein one of the display sections of the printer and the scanner shows information regarding the whole system, when the printer and the scanner are used in combination as the system (col. 3, lines 30-31, the user can learn about the state of the system by only checking the display of the scanner unit).

Regarding claim 3, Watanabe discloses the image forming system as set forth in claim 2, wherein the display section of the scanner (col. 3, lines 30-31, the user can learn about the state of the system by only checking the display of the scanner unit) is the display section that displays the information regarding the whole system, when the printer and the scanner are used in combination as the system.

Regarding claim 4, Watanabe discloses the image forming system as set forth in claim 2, wherein the display section that displays the information regarding the whole system when the printer and the scanner are used in combination in a system has a larger display screen than the other display section (fig.1, operation display section 103

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which is used to display the state of the system is larger than the display 102a of the printer system, see fig. 1).

Regarding claim 14, Watanabe discloses the image forming system as set forth in claim 1, the display sections of the printer and the scanner seem to be at least partly next to each other with respect to a direction from which the user is expected to view the display sections (fig. 1, display unit 103 is partly next to display 102a).

Regarding claim 15, Watanabe discloses the image forming system as set forth in claim 14, wherein information indicated by a change in a color is displayed on the display section of the printer (col. 3, line 32, display 102a can be LED--inherently when an LED is used as a display it can blink continuously or stay solid in any color to show that an event has occurred), when an operation state of the printer is changed.

Regarding claim 16, Watanabe discloses the image forming system as set forth in claim 15, wherein information of an operation state of the printer indicated by a character (col. 5, lines 26-28, an error in and status of the printer unit 102 are display on the LCD section 701--see fig. 7, display 701 show state of printer display in character), a mark or a design is displayed on a part of the display section of the scanner, when an operation state of the printer is changed.

Regarding claim 17, Watanabe discloses the image forming system as set forth in claim 16, when the operation state of the printer is changed, changed in a synchronizing manner are (a) the information of the operation state of the printer indicated by the character, the mark or the design, displayed on the display section of the scanner (col. 5, lines 26-28, an error in and status of the printer unit 102 are display

on the LCD section 701--see fig. 7, display 701 show state of printer display in character), and (b) the information indicated by the change in the color displayed (col. 3, line 32, display 102a can be LED--inherently when an LED is used as a display it can blink continuously or stay solid in any color to show that an event has occurred) on the display section of the printer (col. 5, lines 26- 32, when an error occurred the message is display at the scanner display unit 103 and the printer display unit 103).

Regarding claim 18, Watanabe discloses the image forming system as set forth in claim 1, wherein the printer and the scanner shares one of the display sections thereof for displaying information regarding the whole system when the printer and the scanner are used in combination as the system (col. 3, lines 26-31, the display 103 as part of the scanner can be used for displaying information of both the scanner unit 101 and the printer unit 102), wherein the one of the printer and the scanner, which includes the display section shared in case of the formation of the system, comprises a first control section (fig. 8, display controller 103a), while the other of the printer and the scanner comprises a second control section (fig. 8, printer controller 100c), where the first control section and the second control section are connected together via a bus line (col. 6, lines 33-35, a signal cable 1001b for supplying video signals), so that, when the system is controlled by the second control sections, the first control section prepares a display data in accordance with instructions from the second control section (col. 3, lines 26-31, the display 103 as part of the scanner can be used for displaying information of both the scanner unit 101 and the printer unit 102), and supplies the

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display data to the shared display section, in case the system has a predetermined operation state that requires display of instructions on the display section.

Regarding claim 19, Watanabe discloses the image forming system as set forth in claim 18, wherein the predetermined operation state is common to when the system is controlled by the first control section and when the system is controlled by the second control section (fig. 7, the display at the first control section is predetermined for the printer and the scanner i.e. the scanner and the printer functions are shown in the same display).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Ito et al (Patent No. 4,682,158) hereinafter Ito.

Regarding claim 5, Watanabe discloses the image forming system as set forth in claim 1, wherein the scanner includes a large-sized display section for display error of the printer to the user (col. 5, lines 26-28, an error in and status of the printer unit 102 are display on the LCD section 701) when the printer and the scanner are used in combination as the system.

Watanabe does not disclose expressly that the display is drawings of the printer, so that detailed information of the printer can be displayed on the large-sized display section of the scanner.

Ito discloses a display unit (fig. 2, CRT 52) with drawing to guide the operator in removing the sheet jammed in the machine (col. 8, lines 6-12, see fig. 10-12).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Watanabe as per teaching of Ito because of the following reason: by looking at a drawing on how to remove the jammed sheet in the printer would be simpler and friendlier for the user than reading a line of instruction on how to remove the jammed sheet.

Regarding claim 6, the combination [Watanabe] discloses that the image forming system as set forth in claim 5, wherein the printer includes a control section (fig. 8, control unit 100, see fig. 8) for controlling the large-sized display section of the scanner, the control section having a display information storing section for storing, in advance, display information for display on the large-sized display section (fig. 8, print controller 100c is connect to operation display controller 103 a sending data from the printer to the scanner display unit, col. 5, lines 32-40), providing for a case where the printer is used in combination with the scanner.

Regarding claim 7, the combination [Watanabe] discloses the image forming system as set forth in claim 5, wherein display information for displaying the detailed information of the printer on the large-sized display section is installed in the printer section (fig. 8, print controller 100c is connect to operation display controller 103 a

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sending data from the printer to the scanner display unit, col. 5, lines 32-40) when the printer and the scanner are used in combination, where the detailed information can be installed by post-installation.

Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Lee (Patent No. 6,191,758).

Regarding claim 8, Watanabe discloses the image forming system as set forth in claim 1, wherein the printer and the scanner respectively include a user interface section composed of the display section and an operation section therein, the image forming system further comprising: a detecting section (fig. 8, scanner controller 100a) for detecting connection of the printer and the scanner when the printer and the scanner are connected together as the system, or disconnection of the printer and the scanner when the printer and the scanner are disconnected from each other (col. 5, lines 60-65, by having the scanner controller 100a it allows integration with a printer unit).

Watanabe does disclose expressly a control section for inactivating one of the user interfaces section of the printer and the scanner when the detection section detects the connection of the printer and the scanner.

Lee discloses a system with a main display device 22 and a auxiliary display device 24 and based on the program being executed a control section will activated the appropriate display for the program and inactivate the inappropriate display (fig. 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Watanabe as per teaching of Lee because of the

following reason: by being able to inactivate (i.e. turning it off or putting in it in sleep mode) the display that is not being use will save power, therefore saving cost.

Regarding claim 9, the combination discloses [Watanabe] the image forming system as set forth in claim 8, wherein the control section inactivates the user interface section of the printer (fig. 1, display 103 is place on top of printer 102 it would have been obvious to inactivates the display of printer 102a because the user does not have to squat down to see the display on the printer by using display 103 which right above 102a), when the detection section detects the connection of the printer and the scanner.

Regarding claim 10, the combination discloses [Watanabe] the image forming system as set forth in claim 8, the control section inactivates the user interface section of one of the printer and the scanner that is installed above the other (fig. 1, display 103 is place on top of printer 102 it would have been obvious to inactivates the display of printer 102a because the user does not have to squat down to see the display on the printer by using display 103 which right above 102a), when the detection section detects the connection of the printer and the scanner.

Regarding claim 11, the combination discloses [Watanabe] the image forming system as set forth in claim 8, wherein the control section activates a user interface section that has been inactivated until then, when the detection section detects the disconnection of the printer and the scanner (col. 5, lines 60-61, the scanner can operate separately--it is obvious that if the two devices are disconnected the display of each device will be reactivated to work independently of each other).

Regarding claim 12, the combination discloses [Watanabe] the image forming system as set forth in claim 8, wherein the detection section has a function for detecting whether or not the scanner and the printer are connected as the system, when power is supplied (col. 6, lines 35-37, the device is connected thru a cable 1001 which exchange various types of control signals between the scanner and the printer when the power is supplied to the devices therefore it is implicit that the device detects that it is connected to each other since the printer is able to send the scanner it display).

Regarding claim 13, the combination [Watanabe] discloses the image forming system as set forth in claim 8, wherein the one of the printer and the scanner whose user interface section is inactivated when the scanner and the printer is used in combination as the system includes a detailed information display section and a simple information display section, wherein the control section inactivates only the detailed information display section when the user interface section is inactivated (col. 5, lines 25-32, the error message will be display on the scanner display unit and the printer display unit).

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Shah (Patent No. 6,618,167).

Regarding claim 20, Watanabe discloses the image forming system as set forth in claim 18, wherein the printer and the scanner are used in combination to display information to the user (col. 3, lines 26-31, the display 103 as part of the scanner can be used for displaying information of both the scanner unit 101 and the printer unit 102).

Watanabe does not disclose expressly that there is a preset priority order between a display data prepared by the first control section and a display data prepared by the second control section, so that the first control section selects which of the display data is to be supplied to the shared display section in accordance with the priority order, when the display data of the first control section and that of the second control section are prepared at a same time.

Shah discloses that a user can prioritize task (col. 2, lines 32-35).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Watanabe as per teaching of Shah because of the following reason: by prioritizing task it insure that the task with the highest priority (most important task) get process first (col. 3, lines 55-56).


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew H. Lam whose telephone number is (571) 272-8569. The examiner can normally be reached on M-F (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "David Moore".

**DAVID MOORE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**